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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,589	07/02/2003	Sakae Suda	1232-5077	5542

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,589

Applicant(s)

SUDA ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 7-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3,5 and 7-11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

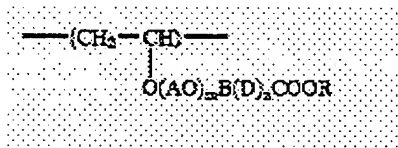
1. All outstanding rejections are overcome by applicants' amendment filed 10/28/05.

In light of the new grounds of rejection set forth below which are necessitated by the use of a new reference against the present claims, namely, Sato et al. '903 (U.S. 2003/0232903) as well as new grounds set forth with respect to Sato et al. '343 (U.S. 2003/0236343), the following action is non-final.

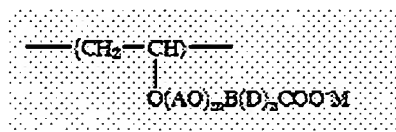
Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-3, 5, and 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. '343 (U.S. 2003/0236343).

Sato et al. '343 disclose dispersible composition including ink or toner comprising medium that is solvent or binder resin, functional substance, i.e. colorant, and amphipathic block polymer comprising monomer of the formula:



or



where A is straight chain or branched alkylene group having 1-15 carbon atoms, m is 0-30, B is single bond or alkylene, D is aromatic group, n is 1-10, R is hydrogen or alkyl group, and M is mono- or poly-valent cation. The block polymer contains both hydrophobic and hydrophobic blocks. It is further disclosed that the colorant is encapsulated by the block polymer. There is also disclosed image forming method comprising applying the ink to substrate to form image (paragraphs 2, 22, 25-28, 31, 84-85, 87-88, 95-86, 99-101, 105, 127-128, 135, and 141-143).

In light of the above, it is clear that Sato et al. '343 anticipate the present claims.

4. Claims 1, 3, 5, 7, 9, and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. '903 (U.S. 2003/0232903).

Sato et al. '903 disclose dispersible composition including ink comprising solvent, colorant, and block polymer obtained from vinyl ether of the formula $-(CH_2-\overset{\underset{\text{OR}^1}{|}}{CH})-$ wherein R^1 is phenyl, $-(CH(R^2)-CH(R^3)-O)-R^4$ where R^4 is phenyl and R^2 and R^3 each represent H or CH_3 , or $-(CH_2)_m-(O)_n-R^4$ where m is 1-36 and n is 0 or 1 which is identical to the presently claimed monomer unit. It is disclosed that the block polymer encapsulates the colorant and that the block polymer is obtained from hydrophilic and hydrophobic monomer units, i.e. is amphipathic. There is also disclosed image forming method comprising applying the ink to substrate to form image (paragraphs 1, 7, 11-13, 21, 25, and 42).

In light of the above, it is clear that Sato et al. '903 anticipate the present claims.

Response to Arguments

5. Applicants' arguments regarding JP 09-157653, Rao (U.S. 5,283,148), Schimmel et al. (U.S. 5,585,427), Nguyen et al. (U.S. 5,990,202), and Sato et al. '364 (U.S. 2003/0050364) have been fully considered but they are moot in view of the discontinuation of the use of these references against the present claims.

6. Applicants' arguments filed 10/28/05 have been fully considered but with respect to Sato et al. '343 they are not persuasive.

Specifically, applicants argue that there is no disclosure in Sato et al. '343 that the block polymer encapsulates the colorant as now required in all the present claims.

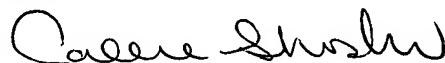
However, while it is noted that the examiner did not previously use Sato et al. '343 to reject claim 6, which has been cancelled in the amendment filed 10/28/05 and its limitation, namely, that the block polymer encapsulate the colorant, inserted into claim 1, upon reconsideration of the reference, it is noted that paragraph 135 of Sato et al. '343 does in fact disclose that the block polymer encapsulates the colorant. Thus, it is the examiner's position that Sato et al. '343 do meet all the requirements of the present claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
1/14/06